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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JERRY L. ALLEN

Application 14/712,101 Technology Center 3700

Before CHARLES N. GREENHUT, ANNETTE R. REIMERS, and SUSAN L. C. MITCHELL, *Administrative Patent Judges*.

REIMERS, Administrative Patent Judge.

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant¹ appeals from the Examiner's decision to reject claims 5–10. Claims 1–4 have been canceled.² We have jurisdiction under 35 U.S.C. § 6(b).

We REVERSE.

¹ We use the word Appellant to refer to "applicant" as defined in 37 C.F.R.

^{§ 1.42.} Appellant identifies the real party in interest as WESCO Distribution, Inc. Appeal Brief ("Appeal Br.") 3, filed Dec. 19, 2017.

² In the Advisory Action ("Adv. Act."), dated October 5, 2017, the Examiner entered the amendment filed by Appellant to cancel claims 1–4 and to amend claim 9. *See* Adv. Act.; *see also* Appellant's Response to Office Action, filed Sept. 13, 2017.

CLAIMED SUBJECT MATTER

The claimed subject matter relates to a method of introducing a cable/plurality of cables into a longitudinally extending conduit. Claims 5, 8, 9, and 10 are independent. Claim 5, reproduced below, is illustrative of the claimed subject matter and recites:

5. A method of introducing a cable into a longitudinally extending conduit comprising the steps of attaching a pliant material to the cable by using an adhesive, and thereafter introducing the cable with the pliant material having less friction than the cable attached thereto into the conduit.

REFERENCES The prior art relied upon by the Examiner is:

Reference Name	Document ID	Date
Conti	US 5,027,864	July 2, 1991
Delomel	US 5,167,399	Dec. 1, 1992
Allen	US 9,054,507 B2	June 9, 2015
Holland	US 2002/0170728 A1	Nov. 21, 2002
Li	WO 02/37632 A2	May 10, 2002

REJECTIONS^{3,4}

Claims 5, 6, and 8–10 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Conti, Holland, and Li.

²

³ In the Advisory Action dated October 5, 2017, the Examiner indicated that Appellant's amendment to claim 9 has overcome the rejection of claim 9 under 35 U.S.C. § 112, second paragraph. *See* Adv. Act.; *see also* Appellant's Response to Office Action filed Sept. 13, 2017; Final Office Action ("Final Act.") 2, dated June 27, 2017.

⁴ On September 13, 2017, Appellant filed a Terminal Disclaimer directed to US Patent No. 9,054,507 B2 to address the Examiner's double patenting

Claim 7 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Conti, Holland, Li, and Delomel.

ANALYSIS

Obviousness over Conti, Holland, and Li

Claims 5 and 6

Independent claim 5 is directed to a method of introducing a cable into a longitudinally extending conduit and includes the step of "attaching a pliant material to the cable by using an adhesive." Appeal Br. 10 (Claims App.). The Examiner finds that Conti "disclose[s] a method of introducing a cable 50 . . . into a longitudinally extending conduit 10" but "fail[s] to disclose attaching a pliant material to the cable by using an adhesive." Final Act. 7. The Examiner finds that Holland "teaches attaching a pliant material 66 . . . to a cable 64 . . . by using an adhesive . . . to mak[e] a cable abrasion-resistant . . . when being moved or pulled." *Id.* The Examiner reasons that it would have been obvious to a skilled artisan to modify Conti "to attach a pliant material to a cable, as taught by Holland, for the purpose of making a cable abrasion-resistant." Final Act. 8 (citing Holland ¶ 30); *see also id.* at 14 (Conti "disclose[s] that the cable is being moved (advanced). Therefore, attaching a pliant material to a cable, as taught by Holland, will be beneficial and useful to make the cable more resistant.").

Appellant contends that Conti "recognizes that there is a problem with insertion, and it solves that problem by applying lubricant to the cables";

rejection. See Appellant's Response to Office Action filed Sept. 13, 2017; see also Final Act. 2–6. The Terminal Disclaimer, approved by the Office on September 18, 2017, renders the double patenting rejection moot.

therefore, Conti "does not need a sleeve of pliant material to assist in the introduction of the cable into the conduit." Appeal Br. 6. Appellant also contends that Conti "does not need anything attached to its cables because it uses a lubricant to ease insertion. It certainly does not need the abrasive-resistant sleeve of Holland." *Id.* at 7; *see also id.* (Conti "does not need such a sleeve.").

Appellant has the better position here. Conti discloses an inner duct apparatus "comprised of plastic material whereby the particularly effective lubricant to be applied to the outer surface of the inner duct during placement operation is a water-based polymer which will wet the plastic surface of the inner duct." Conti 3:64–4:2. Conti further discloses that "[t]his type of lubricant will adhere to the surface of the inner duct to insure the presence of effective quantities of lubricant during the placement operation" and that "[t]he lubricant composition is non-degrading to plastic material and, therefore, [is] especially useful for lubricating the surface of the inner duct apparatus of the present invention as well as a plastic sheathed cable which will be placed in the inner duct." *Id.* at 4:2–13; *see also id.* Abstract ("The inner duct has a continuous side wall with protruding ribs on the inside and outside surfaces to maintain an effective supply of lubricant during the installation of the inner duct and cable in the inner duct.").

Conti also discloses that as shown in Figure 4, "reservoirs of lubricant are established by the spaces between ribs 36 and from these reservoirs, lubricant is continuously fed to the protruding edge surfaces of the ribs to maintain an effective lubricant film between the inner duct and the duct 10." Conti 6:31–36, Fig. 4. Additionally, Conti discloses that

[t]he presence of lubricant on the cable greatly reduces friction and thus the pulling force required to install the cable in the inner

duct. It can be seen from FIG. 4, that the protruding ribs from the inner surface of the inner duct provide reservoir areas for lubricant which is supplied to the edges of the ribs to maintain an effective film of lubricant on the outer surface of the cable 50 while advanced in the inner duct 30.

Id. at 6:61–68 (emphasis added), Fig. 4.

We appreciate the Examiner's position that a skilled artisan would understand that "in practice[,] lubricated systems are not always perfectly lubricated due to inhibited lubricant flow and/or improper maintenance of the fluid within the passage/channel" and, in that scenario, the skilled artisan would "look to supplemental means for protecting the cable within the tube/duct." Ans. 2.5 However, as Conti already discloses an effective supply/quantity of lubricant that is "continuously fed" during the cable installation process in order to reduce friction and the pulling force required to install the cable, we fail to see, and the Examiner fails to adequately explain, why modifying Conti's cable to include a pliant material attached to the cable, as taught by the "unlubricated system" of Holland, would resolve the problems suggested by the Examiner associated with any imperfections in lubrication systems, to thereby further aid in reducing friction/abrasion during insertion/installation of Conti's cable (i.e., would "make [Conti's] cable *more* [friction/abrasion] resistant") and/or would *further protect* Conti's cable "within the tube/duct." See Ans. 2–3 (emphasis added); see also Final Act. 8, 14; Reply Br. 2 (Conti addresses "the friction problem" associated with insertion of cable into a conduit by providing an elaborate lubrication system both between the tube and the conduit and between the

⁵ Examiner's Answer ("Ans."), dated June 11, 2018.

cable and the tube.") (emphasis added). The Examiner does not propose the materials of Holland and Li as an alternative to, or substitute for, the lubrication system of Conti. However, the Examiner does not provide sufficient evidence or technical reasoning to demonstrate it would have been obvious to the skilled artisan to employ such systems *in combination*. As the Examiner fails to provide a sufficient reason based on rational underpinnings to combine the teachings of Conti and Holland, the Examiner fails to establish by a preponderance of the evidence that the combined teachings of Conti, Holland, and Li disclose the cable introduction method of claim 5.7

For the above reasons, we do not sustain the Examiner's rejection of claims 5 and 6 as unpatentable over Conti, Holland, and Li.

Claims 8–10

Independent claim 8 is directed to a method of introducing a cable into a longitudinally extending conduit and, similar to claim 5, includes "attaching a pliant material" to the cable. Appeal Br. 10 (Claims App.). Additionally, each of independent claims 9 and 10 are directed to a method of introducing a plurality cables into a longitudinally extending conduit and, similar to claim 5, each includes "attaching a pliant material" to the cable. *Id.* at 11 (Claims App.). The Examiner relies on the same unsupported findings and reasoning as that discussed above for claim 5. *See* Final Act. 10–12. Accordingly, for reasons similar to those discussed above for claim

⁶ Reply Brief ("Reply Br."), filed Aug. 9, 2018.

⁷ The Examiner notes that "Li is solely used to teach known materials commonly applied in the art of woven fabric covered cables." Ans. 4; *see also* Final Act. 7–8.

5, we do not sustain the Examiner's rejection of claims 8–10 as unpatentable over Conti, Holland, and Li.

Obviousness over Conti, Holland, Li, and Delomel

Claim 7

Claim 7 depends from claim 5. Appeal Br. 10 (Claims App.). The Examiner does not rely on the teachings of Delomel to remedy the deficiencies discussed above for claim 5. *See* Final Act. 9. Accordingly, for reasons similar to those discussed above for claim 5, we do not sustain the Examiner's rejection of claim 7 as unpatentable over Conti, Holland, Li, and Delomel.

CONCLUSION

In summary:

Claims	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
Rejected				
5, 6, 8–10	103(a)	Conti, Holland, Li		5, 6, 8–10
7	103(a)	Conti, Holland, Li,		7
		Delomel		
Overall				5-10
Outcome				

REVERSED